

USSR/Human and Animal Morphology (Normal and
Pathological). Reproductive System.

S-6

Abs Jour: Ref Zhur-Biol., No 16, 1958, 74400

Author : Tonchiyeva, O. I.

Inst : AS USSR.

Title : On Reactive Changes of the Endometrium by
Action of Chemical Stimulants.

Orig Pub: Dokl. AN SSSR, 1956, 110, No 4, 677-679

Abstract: Reactive changes of the endometrium by 28
nonpregnant female rabbits, responding to
introduction into the tubular opening of
the uterus of 0.5 ml of a 1% solution of
iodine diluted in 70% alcohol or a 0.2 ml
of a 50% solution of turpentine in vegetable
oil, were studied. Upon introduction of io-

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dine solution in early stages (12-24 hours),
necrosis of mecos membrane occurred; after
48 hours, a sharply-defined zone of necrosis
was discovered, deposits of fibrine, hemor-
rhages and, in the adjoining unaffected layer,
pronounced proliferation of connective-tissue
cells around the vessels. Leukocytic reaction
is poorly pronounced. After 3-4 days, the ne-
crotic layer of mucous membrane detaches and
there remains a layer of granulations, which
grow first and later transform into fibrous
cicatrical tissue, as a consequence of which
the lumen of the horn narrows and in parts
becomes obliterated. From 3-4 days, the

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process of epithelization begins which ends towards the 10th day. Epithelium, growing over the granulation tissue, has a peculiar form and forms an outgrowth of glandular tubes into underlying tissue. With introduction of turpentine, after 6 hours the lumen of the horn is widened by inflammatory exudate; after 24 hours there is necrosis of the mucosa. After demarcation of the necrotic layer, epithelization of granulation tissue occurs. For the horn of the uterus, fast elimination of injuring substances and necrotic masses from the lumen, and a course of inflammatory processes and regeneration of mucous membrane, is characteristic. The character of the inflammatory reaction

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Abs Jour: Ref Zhur-Biol., No 16, 1958, 74400

depends on the nature of the irritant. With injury with turpentine, leukocytic reaction is principally observed; with action of iodine solution, an accumulation of macrophages and development of granulation tissue is observed. The inflammatory and regenerative growth of the epithelium, as well as its structure, mostly depend on the character of the underlying connective tissue. --
A. P. Dyban

Card : 4/4

TOPCHYEVA, O.I., kand. med. nauk

Role of atypical endometrial changes (the Arias-Stella reaction)
in the diagnosis of disorders in extrauterine pregnancy. Akush.
i gin. 39 no.4:19-22 JI-Ag'63 (MIRA 16:12)

1. Iz kafedry akusherstva i ginekologii (zav. - zasluzhennyy
deyatel' nauki prof. I.I.Yakovlev) I Leningradskogo meditsin-
skogo instituta imeni I.P.Pavlova.

TOPCHIEVA, O.I.; ZHEMKOVA, Z.P.

Characteristics of the structure of the human placenta in prolonged pregnancy. Akush. i gin. 40 no.5:54-57 S-C '64. (MIRA 18:5)

1. Kafedra akusherstva i ginekologii (zav. - prof. I.I.Yakovlev)
I Leningradskogo meditsinskogo instituta i otdel embriologii In-
stituta eksperimental'noy meditsiny (zav. - chlen-korrespondent
AMN SSSR prof. P.G.Svetlov) AMN SSSR, Leningrad.

TOPCHIEVA, O.I.

Effect of estrogenic hormones on the course of inflammatory and regenerative processes of the endometrium. Akush. i gin. no.6:79-84
(MIRA 17:12)
N-D '63.

1. Iz kafedry akusherstva i ginekologii (zav. - zasluzhennyy deyatel' nauki prof. I.I.Yakovlev) i Leningradskogo meditsinskogo instituta imeni I.P.Pavlova i otdel patologicheskoy anatomii (zav. - akad. N.N. Anichkov) Instituta eksperimental'noy meditsiny AMN SSSR.

TOPCHIEVA, O.I.

Reactive changes of the endometrium due to chemical stimuli. Dokl. AN
SSSR 110 no.4:677-679 O '56. (MIRA 10:1)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh
nauk SSSR. Predstavleno akademikom N.N. Anichkovym.
(UTERUS)

LATKINA, O.A.; TOPCHYEVA, O.I.

Significance of a cytological method in the detection of early stages of cancer of the cervix uteri at a gynecological consultation center. Akush. i gin. 36 no.3:47-50 My-Je '60. (MIRA 13:12)
(UTERUS--CANCER)

TOPCHYEVA, O.I.; SEMENOVA, I.I.

Comparative evaluation of the results of cytological and histological laboratory examination and the Aschheim-Zondek reaction in the diagnosis of extrauterine pregnancy. Sbor.nauch.trud.Kaf. akush. i gin. 1 IMI no.2:362-68'61. (MIRA 16:7)
(PREGNANCY, EXTRAUTERINE)

TOPCHIEVA, O.I.

Experimental staphylococcal endometritis. Sbor.nauch.trud.Kaf.
akush. i gin. i LMI no.28369-377'61. (MIRA 1687)
(ENDOMETRIOSIS) (STAPHYLOCOCCAL INFECTIONS)

A study has been made of the literature of international law and international

SKABALLANOVICH, I.A., doktor geol.-miner. nauk, otv. red.;
MEL'NIKOV, G.B., doktor biol.nauk, red.; KHMARSKIY,
N.Z., kand. geol.-min. nauk, red.; TOFCHIYEV, Ye.A.,
inzh., red.

[Transactions of the Conference on the Hydrogeology and
Engineering Geology of the Dnieper Reservoir Region and
Dnieper Valley Irrigation Systems] Trudy Soveshchaniia
po gidrogeologii i inzhenernoi geologii raiona dneprov-
skikh vodokhranilishch i irrigatsionnykh sistem Pri-
dneprov'ia. Dnepropetrovsk, Nauchno-issl. in-t geol.,
1962. 252 p. (MIRA 17:3)

1. Soveshchaniye po gidrogeologii i inzhenernoy geologii
rayona dneprovskikh vodokhranilishch i irrigatsionnykh
sistem Pridneprov'ya, 1962. 2. Dneprovskiy gosudarstven-
nyy universitet (for Skaballanovich, Mel'nikov, Khmarskiy).

TOPCHIYEVA, Ye. P.

"The Effect of the Efferent Nerves of the Heart on the Sensitivity of the Heart to Humoral Actions." Cand Med Sci, L'vov State Medical Inst, L'vov, 1953. (RZhBiol, No 7, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556 24 Jun 55

TOPCHIEVA, Ye. P. (Prof.)

AID P - 2459

Subject : USSR/Medicine

Card 1/2 Pub. 37 - 6/18

Authors : Bukhovets, V. I., Kand. of Med. Sci., Val'chuk, N. K.,
Kand. of Biol. Sci., Vitte, N. K., Prof., Gabovich, R.D.,
Prof., Topchieva, Ye. P., Kand. of Med. Sci.

Title : Comparative physiological and hygienic evaluation of
the conditions of work on tractors

Periodical : Gig. i san., 6, 26-33, Je 1955

Abstract : Describes the scientific research work conducted by
different departments of the Vinnitsa Medical Institute
since January 1954, for the study of health conditions
of tractor operators depending on the structural
characteristics of caterpillar and wheel tractors of
different make, on the type of agricultural work and
daily schedule, climate, weather, etc. The investigations
were performed chiefly at the Vinnitza Machine Tractor
Station Base during the Sowing Campaign of the spring
1954. The effect of noise, of dust content and carbon

Gig. 1 san., 6, 26-33, Je 1955

AID P - 2459

Card 2/2 Pub. 37 - 6/18

monoxide concentration in the air, and of special structural features of tractors on the physiological reactions of operators are analyzed. Recommendations are made. 4 tables.

Institution: Vinnitsa Medical Institute

Submitted : Sept. 18, 1954

101-54115-101-1

EXCERPTA MEDICA Sec.2 Vol.9/8 Physiology, etc. Aug56

3644. TOPTSHIYEVA E. P. Chair of norm. Physiol., Med. Inst., Winitzki. *Conditioned changes of heart action in the dog on stimulation (Russian text) FIZIOL. Z. 1955, 41/6 (748-755) Illus. 1
Electrical stimulation of the skin in dogs produced shortening of the R-R and P-R intervals and increase of the P, R and T waves. A conditioned acoustic stimulus produced the same changes in the ECG after only 3 repeats. The conditioned reflex is very stable, it disappears only after 200 or more applications of the conditioned stimulus without fortification with the unconditioned pain stimulus.
Simonson - Minneapolis, Minn.

TOPCHIEVA, Ye.P.

Electric potentials of the nerve cells of intracardiac ganglia
in frogs. Fiziol. zhur. 49 no.2:208-213 F'64 (MIRA 17:3)

1. Meditsinskiy institut imeni Pirogova, Vinnitsa i Meditsin-
skiy institut imeni Pirogova, Odessa.

TOPCHYEVA , Ye. P. Cand Med Sci -- (diss) *On the mutual relations* "~~The interrelation~~ between
~~the nervous and the humoral influences and their effect~~ *effects in upon* on the heart."

Odessa, 1956. 10 pp (Odessa State Medical Inst im N.I. Pirogov). 100 copies.

(KL, 37-58, 113).

- 36 -

TOPCHYEVA, Ye.P.

Distorted cardiac reaction to adrenaline. Vrach.delo no.5:543
My '58 (MIRA 11:7)

1. Kafedra normal'noy fiziologii Vinnitskogo meditsinskogo instituta
(rukovoditel' raboty - prof. F.N. Serkov).
(ADRENALINE)
(HEART)

VITTE, N.K.; MIZRUKHIN, I.A.; TOPCHIYEVA, Ye.P.

Registration of cerebral and cardiac bioelectric potentials in
schizophrenics during sleep. Zhur.nevr. i psikh. 59 no.4:416-
421 '59. (MIRA 12:6)

1. Kafedra psikhiiatrii (zav. - prof.I.A.Mizrukhin) i kafedra
fiziologii (zav. - prof.N.K.Vitte) Vinnitskogo meditsinskogo
instituta.

(SCHIZOPHRENIA, physiol.

ECG & EEG during sleep (Rus))

(ELECTROCARDIOGRAPHY, in var. dis.

schizophrenia, during sleep (Rus))

(ELECTROENCEPHALOGRAPHY, in var. dis.

same)

(SLEEP, physiol.

ECG & EEG in schizophrenics (Rus))

TOPCHIEVA, Ye.P.

Electric responses from individual neurons of the intramural
cardiac ganglia in frogs following stimulation of the vagus
and sympathetic nerves. Fiziol. zhur. 51 no.10:1231-1237
O '65. (MIRA 18:12)

1. Kafedra normal'noy fiziologii Vinnitskogo meditsinskogo
instituta i Kafedra normal'noy fiziologii Odesskogo meditsinskogo
instituta. Submitted January 6, 1964.

VITTE, N.K., prof.; MIZRUKHIN, I.A., prof.; TOPCHIYEVA, Ye.P., kand.med.
nauk

Change in thermoregulation in schizophrenics during treatment with
aminazine. Vrach. delo no.4:97-100 Ap '61. (MIRA 14:6)

1. Kafedra psikiatrii (zav. - prof. I.A.Mizrakhin) i kafedra
normal'noy fiziologii (zav. - prof.N.K.Vitte) Vinnitskogo medi-
tsinskogo instituta. (SCHIZOPHRENIA) (CHLORPROMAZINE) (BODY TEMPERATURE)

S/275/63/000/002/024/032
D405/D301

AUTHORS: Topchubashov, M.A. and Memmedov, I.A.

TITLE: Automatic quality control of oil products by ultrasonic method

PERIODICAL: Referativnyy zhurnal, Elektronika i ee primeneniye, no. 2, 1963, 23, abstract 2V144 (Energetika inst. eserleri. AzerbSSR Elmler Akad., Tr. Energ. in-ta AS-AzerbSSR, v. 15, 1962, 155-165 (Azerbaydzhani: summary in Rus.))

TEXT: The advantages of the ultrasonic quality control method of oil products are listed, viz.: 1) the possibility of continuous process-control; 2) high accuracy and speed; 3) no disruption of the engineering process. An ultrasonic generator circuit is proposed which excites a magnetostriction transducer. The frequency-response characteristics are given of the system as a whole, as well as of its various elements, that are necessary for the design of the control system. 6 references.

[Abstracter's note: Complete translation]

Card 1/1

SIMONYAN, A.T., prof.; AYVAZYAN, A.A., kand.med.nauk; GYULIKEKHHVYAN, N.G.;
TOPCHYAN, A.A.

Data on the etiology, pathogenesis, and treatment of nephrosis.
Sov.med. 25 no.2:24-36 F '61. (MIRA 14:3)

1. Iz kafedry gosptal'noy terapii (zav. - prof. A.T. Simonyan)
Yerevanskogo meditsinskogo instituta (direktor - dotsent S.N.
Galstyan).

(KIDNEYS—DISEASES)

CHIGVINADZE, D.M.; TOPCHYAN, L.S.; NATSVLISHVILI, G.I.

Effect of the direction of heat transfer on the orientation
of the growth of single crystals of some nonferrous metals.
Trudy Inst.fiz.AN Gruz.SSR 8:267-275 '62. (MIRA 16:2)
(Metal crystals—Growth)

TOPCHYAN, Zh. S., Cand Med Sci -- "Certain problems of the
cardiac condition ^{in the} ~~when~~ ^{management} treating patients under conditions of
the Dzhermuk high-altitude balneotherapeutic health resort."

Yerevan, 1961. (Sci Res Inst of Health Resort Sci and Phys
^{Methods of Therapy of the}
~~Therapeutic Methods~~ Min of Health ArSSR. Admin of Dzhermuk
Health Resort, Republic Health Resort ^{Admin} ~~Man~~ of Trade Unions ArSSR)
(KL, 8-61, 265)

TOPCHYAN, M. S.

"Complications from Using DDT to Control Ox Warble Flies"

Armenian Scientific Research Veterinary Institute

Veterinariya, No. 7, July 1950, pp 42-45 (HEXACHLORANE AND DDT - by A. A. Zhikharev, from

Material Received by the Editor) 1 $\frac{1}{2}$ -page summary -

U-5472, p 7

Topchyan, M. S.

✓ The toxic properties of potassium chloride for cattle.
M. S. Topchyan and K. G. Aver'yanova. *Izvest. Akad.
Nauk Armyan. S.S.R., Biol. i Sel'skhoz. Nauk.* 8, No. 7, 1955, pp. 62-63 (1955) in Russian; Armenian summary 62-8, 1955.
Sheep and goats were fed with various doses of KCl. A
single oral dose of 4 g./kg. wt. was fatal to the former but
not to the latter. When fed to goats craving for salt, the
same dos. may prove fatal. In doses of 1-2 g./kg. wt.
daily for a period of 10 days to sheep no fatal cases were ob-
served. To follow up the KCl poisoning the drop in leuco-
cyte count is to be observed. J. S. Joffe

TOPCHYEN, E. A., Eng.

Runoff

Short-cut calculations of the local runoff over a period of many years. Gidr. i mel.
5, no. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

RUMANIA

TOPCIU, Aurica, Dr, TEODORESCU, G., Chemist and DRAGHICI, M., Technician. Work performed at the Section of the Microbe Physiology (Sectia de Fiziologie Microbiana) and the Pathogenic Cocci Section (Sectia Coci Patogeni) of the "Dr. I Cantacuzino" Institute (Institutul Dr. I. Cantacuzino"), Bucharest.

"A New Medium for the Cultivation of Meningococci."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 8, No 1, Jan-Feb 1963, pp 91-94.

Abstract: Describes the materials and methods used for the preparation of a new culture medium for meningococci that also proved useful for the isolation of strains. It contains corn, glucose and agar extracts and, for more difficultly cultivable strains such as type I (628), type A Pasteur (52,136) and type A Pasteur (52,137), defibrinated sheep's blood. It is easily prepared and 20 times cheaper than the media used so far. Includes 1 table and 10 references.

TOPCIU, Aurica; POPESCU, Elvira

Research on directed resistance in *Neisseria meningitidis*. I.
Variants of *N. meningitidis* directed "in vitro" by streptomycin.
Arch. roum. path. exp. microbiol. 21 no.1:181-189 Mr '62.

1. Travail de l'Institut "Dr. I. Cantacuzino" -- Service des Cocci
Pathogenes.

(NEISSERIA MENINGITIDIS) (STREPTOMYCIN)
(DRUG RESISTANCE, MICROBIAL)

TOPCIU, Aurica; POPESCO, Elvira.

Research on induced resistance in *Neisseria meningitidis*. II.
Variants observed in *N. meningitidis* strains resistant "in
vitro" to streptomycin. Arch. roum. path. exp. microbiol. 23.
no.3:569-574 S'63

1. Travail de l'Institut "Dr. I. Cantacuzino"; Service des Cocci
pathogenes, Bucarest.

SZABADOS, Judith; TOPCIU, Aurica [deceased]

Research on directed resistance in *Neisseria meningitidis*. Pt.5.
Arch. Roum. path. exp. microbiol. 23 no.4:973-976 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Service de Bio-
chimie Generale (for Szabados), Service des Cocci Pathogenes
(for Topciu).

TOPCIB, P.

Rationalization, p. 26, TEKNIKA, (Ministria Industri-Miniera dhe
Ndertim-Komunikacion) Tirane, Vol. 3, No. 2, Mar./Apr. 1956

SOURCE: East European Accessions List, (EEAL) Library of Congress,
Vol. 5, No. 12, December 1955

RUMANIA

Dr Aurica TOFCIU, Section on Pathogenic Cocci of the Institute (Section on pathogenic, Institutul) "Dr. I. Cantacuzino," Bucharest.

"Bacteriologic Diagnosis of Meningococcal Infections."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 7, No 6, Nov-Dec 1982; pp 497-507.

Abstract: A very detailed technical outline of methods of handling the specimens of cerebrospinal fluid, blood, skin scrapings, joint exudate, conjunctival secretions, throat smears; media and incubation; necropsy specimens; morphologic, cultural, biochemical, enzymatic and serologic diagnostic procedures. Tables correlate 5 classifications of meningococci, and differential diagnosis of 8 species or strains of Neisseria and 2 of diplococci by 11 criteria. Two tables, no references.

1/1

PODHORSKI-COSTIN, Eugenia; TOPCIU, Aurica

Chemical study of the antigens extracted from different types of meningococci. Arch. Roum. path. exp. microbiol. 20 no.3:529-535 S '61.

1. Travail de l'Institut "Dr I. Cantacuzino" Services de Biochimie generale et des Cocci pathogenes.
(MENINGOCOCCUS immunology) (ANTIGENS chemistry)

RUM/3-59-10-13/16

15(8)

AUTHORS: Mihail, P.; Istrăţoiu, R.; Topciu, R. and Petrescu, Gh.

TITLE: Direct Polymerization of Propylene From the C_3 Fraction

PERIODICAL: Revista de Chimie, 1959, Vol 10, Nr 10, pp 602-606

ABSTRACT: Rumania has rich reserves of propylene whereas its aromatics are limited; it was, therefore, natural to try to obtain polystyrene on the basis of an aliphatic product. When the problem arose, Rumania lacked a separation installation for concentrated propylene, needed in polymerization. A solution was found by obtaining polypropylene directly from the C_3 fraction which abounds in Rumanian refineries. Since in the near future important quantities of polypropylene will have to be produced, it was decided to test the procedures in a semi-industrial installation to evaluate the results technically and economically. Pertinent literature indicates the use of a

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Direct Polymerization of Propylene From the C₃ Fraction

monomer with high gas concentration (more than 95%), the polymerization being effected in a hydrocarbon solvent (pentane, hexane, etc.). The author enumerates the various advantages and disadvantages of the procedure. Experiments in the laboratory were at first conducted by using a synthetic C₃ fraction whereas presently, the process is being carried out with the C₃ fraction from refineries. The specific problems of the new procedure are: Desulfurization and purification of the C₃ fraction to make it capable of polymerization; the polymerization of propylene contained in the C₃ fraction without using another solvent; the use of residual gases remaining after polymerization; and the establishing of a technological scheme for designing a semi-industrial installation. In the laboratory, the mixture was achieved in an V2A autoclave with an anchor-type agitator, the separation being achieved by distending the

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RUM/3-59-10-13/16

Direct Polymerization of Propylene From the C₃ Fraction

gases; in the semi-industrial installation special mixers will be used, the two phases will be separated in separators while the desulfurized C₃ fraction after drying is sent to the polymerization installation. Figure 1 shows the semi-industrial installation. Parameters characteristic of the new system are: the conversion as a function of the concentration and the nature of the catalyst; the molecular weight as a function of the molar ratio catalyst/cocatalyst; the conversion as a function of the temperature of the reaction; and the importance of agitation. Figure 8 suggests a design for the industrial installation based on the results obtained in the laboratory. There are 2 flow charts, 1 diagram, 5 graphs and 2 tables.

Card 3/3

RUMANIA

GLUHOVSCHI, N., Prof Dr, TOPCIU, V., Dr, ELIAS, M., Dr, LEVIN, S.
Dr, STAN, M. Dr, PUCA-CIUDIN, M. Dr, and NAFORNITA, M., Eng, of
the Agronomic Institute (Institutul Agronomic), Timisoara, and
the Institute of Medicine (Institutul de Medicina), Timisoara.

"Abortions and Premature Births in Pigs and Sheep Caused by
Certain Infectious Agents."

Bucharest, Revista de Zootehnie si Medicina Veterinara, Vol 13,
No 8, Aug 63, pp 80-88.

Abstract [Authors' English summary modified]: A report on
experimental work by the authors undertaken because
a focus of toxoplasmic abortion was identified in a herd of
sheep in Banat Regiune. Abortion and birth mortality were not
preceded by characteristic prodromal symptoms; the placenta
of the foetus showed typical lesions, and abortion was due to
intra-uterine infection of the foetus. Pyrimethamine seems
to be useful as a chemical prophylactic measure. The authors
were able to reproduce experimentally both the toxoplasmic
abortion of sheep and the clinical course of the disease.
Includes 2 figures, 4 tables and 20 references, of which
11 Western and 10 Eastern.

RUMANIA/Human and Animal Physiology - Internal Secretion.
Suprarenal Glands.

T-7

Abs Jour : Ref Zhur - Biol., No 18, 1958, 84394

Author : Topciu, Vl., Schorschner, E., Tomescu, C.

Inst : Rumanian AS

Title : Gonadotropic Inefficacy of Adrenalin.

Orig Pub : Studii si cercetarii endocrinol. Acad. R.P.R., 1955, 6,
No 3-4, 554-556

Abstract : As 1 ml of a 0.1 percent adrenalin solution (I) was injected into male frogs, a rapid secretion of sperm occurred in 100 percent of the cases, but if 0.5 ml were injected, this phenomenon occurred in 30 percent of the cases only. As gonadotropic hormones (GH) were introduced, sperm secretion began one hour after GH was administered. If GH (10-20 ml of a pregnant woman's urine) were administered

Card 1/2

RUMANIA / Diseases of Farm Animals. Diseases Caused by Bacteria and Fungi R

Abs Jour: Ref Zhur-Biologiya, No 16, 1958, 74176

Author : Gluhovschi, N., Topciu, V., Neta, I., Glavan, B.

Inst : Not given

Title : Diagnosis of Leptospirosis in Horses. Clinical, Epizootiological and Laboratory Investigations, Treatment

Orig Pub: Studii si cercetari stint. Acad. RPR. Baza Timisoara. Ser. Stiinte med., 1956, 3, No 3-4, 121-131

Abstract: No abstract.

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TOPCIU, VI.; VINES, V.

Cold agglutinins in syphilis. Stud. cercet. inframicrobiol.,
Bucur. 7 no.1-2:189-192 Jan-June 56.

(SYPHILIS, blood in
cold agglutinins, determ. & frequency)

(AGGLUTINATION

cold agglutinins in syphilis)

(PNEUMONIA, PRIMARY ATYPICAL, diagnosis

serodiag., cold agglutinin test, validity)

BUSILA, V.T.; BACILA, E.; ROSIU, L.; TOPCIU, V.; BARBULESCU, L.;
DAMIAN, I.

Contribution to the epidemiology of Q fever. Stud. cercet.
inframicrobiol., Bucur. 7 no.3-4:295-301 July-Dec 56.

1. Comunicare prezentata in sedinta Institutului de
inframicrobiologie al Academiei R.P.R.

(Q FEVER, epidemiology
in Rumania, epidemic in agricultural community)

.. sym-

EXCERPTA MEDICA Sec 4 Vol 12/7 Med. Micro. July 59

2086. RESULTS OF SEROLOGICAL AND BACTERIOLOGICAL STUDIES ON THE INCIDENCE OF LEPTOSPIROSIS IN HORSES - Rezultatele cercetărilor serologice și bacteriologice pentru determinarea incidenței leptospirozei la cabaline - Topciu V., Gluhovschi N., Lăstrea V., Elias I. M. and Glăvan B. - STUD. CERCET. ȘTIINT., SER. II 1957, 4/1-2 (61-67) Graphs 1 Tables 4

A study was made of 876 sera from horses of the Arad region, with 251 positive results (28%), and of 179 sera from horses suffering from leptospirosis or periodical ophthalmia, of the same region, with 163 positive results (91%). In the Timișoara area, 105 sera from healthy or diseased horses were examined, with 54 positive results (51%). The majority of the sera presented agglutinins for 2, 3 or 4 different Leptospirae; the highest titres were with *L. pomona*.

RUMANIA / Virology - Human and Animal Viruses.

E

Abs Jour: Ref Zhur-Biol., No 9, 1958, 38246.

Author : Busia, V. T., Topciu, V., Pop, O., Minciu, E.,
Reichrath, S.

Inst : Not given.

Title : Isolation of Coxsackie Virus in a Case of
Epidemic Myalgia.

Orig Pub: Viata med., 1957, 4, No 4, 54-57.

Abstract: No abstract.

Card 1/1

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SPINU, I.; TOPCIU, VI.; TRINH THI HANG QUY; VO VAN HUNG; NGUYEN SY QUOC;
CHU XUAN LUONG; LI VAM TUYEN; NGUYEN VAN AN.

Man as a viral reservoir in an epidemic of leptospirosis occurring in the jungle. Arch. roum. path. exp. microbiol. 22 no.4:1081-1100 S-D'63.

1. Travail des Instituts Medico-Pharmaceutiques de Bucarest,
d'Hygiene de Pimisoara et de Microbiologie de Hanoi.

TOPCIU, VI.; MARIN, I.; CUCURUZ, L.; ELIAS, I.M.; REICHRATH, S.; PORSCHE, T.;
FRASINEL, N.

Isolation of strains of pathogenic *Leptospira* from rodents and humans.
Stud. cercet. inframicrobiol., Bucur. 8 no.1:115-120 1957.

(LEPTOSPIRA

pathogenic strains isolated from rodents & humans in Rumania)

BUSILIA, V.T.; POP, O.; VASILESCU, I.; TOPCIU, VL.; POPIAN, R.; CUCURUZ, L.;
ALEXANDRESCU, R.; ISACSON, I.; SON, C.; CRAVCEVSCHI, V.; ZILBERMAN, L.;
FITARAU, A.; JICMAN, M.

Clinical study of leptospirosis. Stud. cercet. inframicrobiol., Bucur.
8 no.2:259-280 1957.

1. Comunicare prezentata la Institutul de inframicrobiologie al
Academiei R.P.R. in sedinta din 5 martie 1956.

(LEPTOSPIROSIS

pathol. & epidemiol. of L. pomona, L. canicola & other
leptospiral infect. in Rumania, case reports & review)

SURNAME, Given Names

Country: Rumania

Academic Degrees: [not given]

Affiliation: Epidemiology Section of the Timisoara Branch of the RPR Institute of Health (Sectia de Epidemiologie -- Institutul de Igiena RPR Filiala Timisoara) and The Ronat Health Circumscription (Circumscriptia Sanitara Ronat), Ronat, Timisoara.

Source:

Timisoara, Timisoara Medicala, No 2, Jul-Dec 60, pp 65-69.

Data: "The Discovery of Coxsackie Virus in a Poliomyelitis Focus."

Co-authors:

REICHRATH, S., Epidemiology Section of the Timisoara Branch of the RPR Institute of Health; and The Ronat Health Circumscription, Ronat, Timisoara.
NICULESCU-WOLAP, C., Epidemiology Section of the Timisoara Branch of the RPR Institute of Health; and The Ronat Health Circumscription, Ronat, Timisoara.

1/2

670 981643

TOPCIU, Vl.; KRAUSZ, N.; BOGDAN, Valeria

Kidney diseases caused by Coxsackie virus. Stud. cercet. infra-microbiol., Bucur. 11 no. 1:133-140 '60.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310012-5"

1. Comunicare prezentata la Institutul de inframicrobiologie al Academiei R.P.R. in sedinta din 16 septembrie 1959.

(KIDNEY DISEASES, etiology)

(COXSACKIE VIRUSES, infection)

TOPCIU, V. (2)
SURNAME (in caps); Given Names

Country: Rumania

Academic Degrees:

Affiliation: Agronomic Institute (Institutul Agronomic), Timisoara

Source: Bucharest, Probleme Zootehnice si Veterinare, Vol XI, No 10,
Oct 1961, pp 48-51.

Data: "On Certain Rarely Encountered Clinical Symptoms in Pork Leptospirosis."

Authors:

✓ GLUHOVSKI, N., -Prof. Dr.-

✓ TOPCIU, V., -Dr.-

✓ GLAVAN, B., -Dr.-

RUMANIA

TOPCIU, Vl., OLARU, Gh., BACILA, E., VOICULESCU, D., MOLDOVANU, E. and NEVINDGLOVSKI, O. of the Institute of Hygiene and Public Health (Institutul de Igiena si Sanatate Publica), Timisoara.

"Contributions to the Study of the Influenza Epidemic of February-March 1962."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 14, No 5, 1963, pp 593-602.

Abstract [Authors' English summary modified]: The winter-spring 1952 influenza epidemic was caused by the same strain that caused the 1957 pandemic and the 1959 epidemic, namely virus A₂. The authors describe the characteristics of the isolated strains, the dynamic evolution of the anti-influenza antibodies, and some clinical and epidemiological peculiarities of the epidemic. Because of the repeated immunizations during the 3 epidemic waves caused by the A₂ strain and the induced resistance, the authors expect the inter-epidemic period to extend until the antigenic structure of the circulating influenza virus strains undergoes large changes.

Includes 6 figures, 1 table and 15 references, of which 2 Rumanian, 2 Russian, 1 French and 10 English-language.
1/1

TOPCIU, Vl.; BARCARU, Elena; BÄR, Fr.; FERENCZY, St.; MARTONY, A.

Methods of preparing the phagoresistant stems of *Clostridium acetobutylicum* Weitzmanni, and results obtained from the laboratory and factory tests. *Studii chim Timisoara* 9 no.1/2:141-160 Ja-Je '62.

1. Fabrica de butanol-acetona "Solventul" si Institutul de Igiena, Timisoara.

TOPCIU, Vl.; BARGARU, Elena; LEVIN, S.

Studies on the bacteriophagic and bacterial infections in the fermenting acetobutylic industry. Studii chim Timisoara 9 no.1/2:121-139 Ja-Je '62.

1. Fabrica de butanol-acetona "Solventul" si Institutul de Igiena, Timisoara.

*

TOPCIU, Vl.; OLARU, Gh.; BACILA, E.; VOICULESCU, D.; MOLDOVANU, E.;
NEVINDGLOVSKI, O.

Contributions to the study of the epidemic of influenza of
February - March, 1962. Stud. cercet. inframicrobiol. 14
no.5:593-602 '63.

(INFLUENZA) (EPIDEMIOLOGY)

TOPCIU, Vl.; SPINU, I.; avec la collaboration de TRINH THI HANG QUY;
VO VAN HUNG; CHU XAUN LOUNG; LE VAN TUYEN

Pathogenicity for guinea pigs of strains of *Leptospira* isolated
from patients and convalescents in North Viet-Nam. Arch. Roum.
path. exp. microbiol. 23 no.4:851-860 D '64.

1. Travail de l'Institut d'Hygiene et de Sante Publique, Timisoara
et de l'Institut "Dr. I. Cantacuzino" (for Topciu, Spinu).
2. Institut de Microbiologie de Hanoi (for Trinh Thi Hang Quy,
Vo Van Hung, Chu Xaun Leung, Le Van Tuyen). Submitted May 15, 1964.

RUMANIA

616.931-022.362

TOPCIU, VI., Dr. NICA, Al., Dr. LUSTREA, V., Dr. ALEXANDRESCU, N., Dr. and BACILA, E., Dr. Work performed at the Institute of Hygiene (Institutul de Igiena), Timisoara.

"Carriers of Toxigenetic Diphtheria Bacilli of the Gravis Type Showing Positive Cutaneous Reactions."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 11, No 4, Jul-Aug 66, pp 363-366.

Abstract [Authors' English summary modified]: A report on a study of 1,114 children from children's communities in which there were diphtheria outbreaks. Among these children 117 were found to be carriers of *Corynebacterium diphtheriae*, including 11 who had a positive Schick reaction but showed no clinical symptoms of the disease. Antitoxin titration was carried out for 6 of the 11 Schick-positive carriers, and in 2 of them the level of antitoxin was found to be below the accepted protective value. It is assumed that the protection was due to antibacterial immunity or to local immunity.

Includes 13 references, of which 3 Rumanian, one Russian, 3 German and 6 Western.

1/1

- 13 -

RUMANIA

576.8.097.35-085.371

TOPCIU, VI., PLAVOSIN-BABUSCEAC, Livia, CSAKY, N., RADU, M., VOICULESCU, D., TRANDAFIRESCU, Virginia, NICOLAU, I., STEFAN, Margareta, COMSULEA, Lia, and KECSKES, Elisabeta, of the Institute of Hygiene and Public Health (Institutul de Igiena si Sanatate Publica), Timisoara.

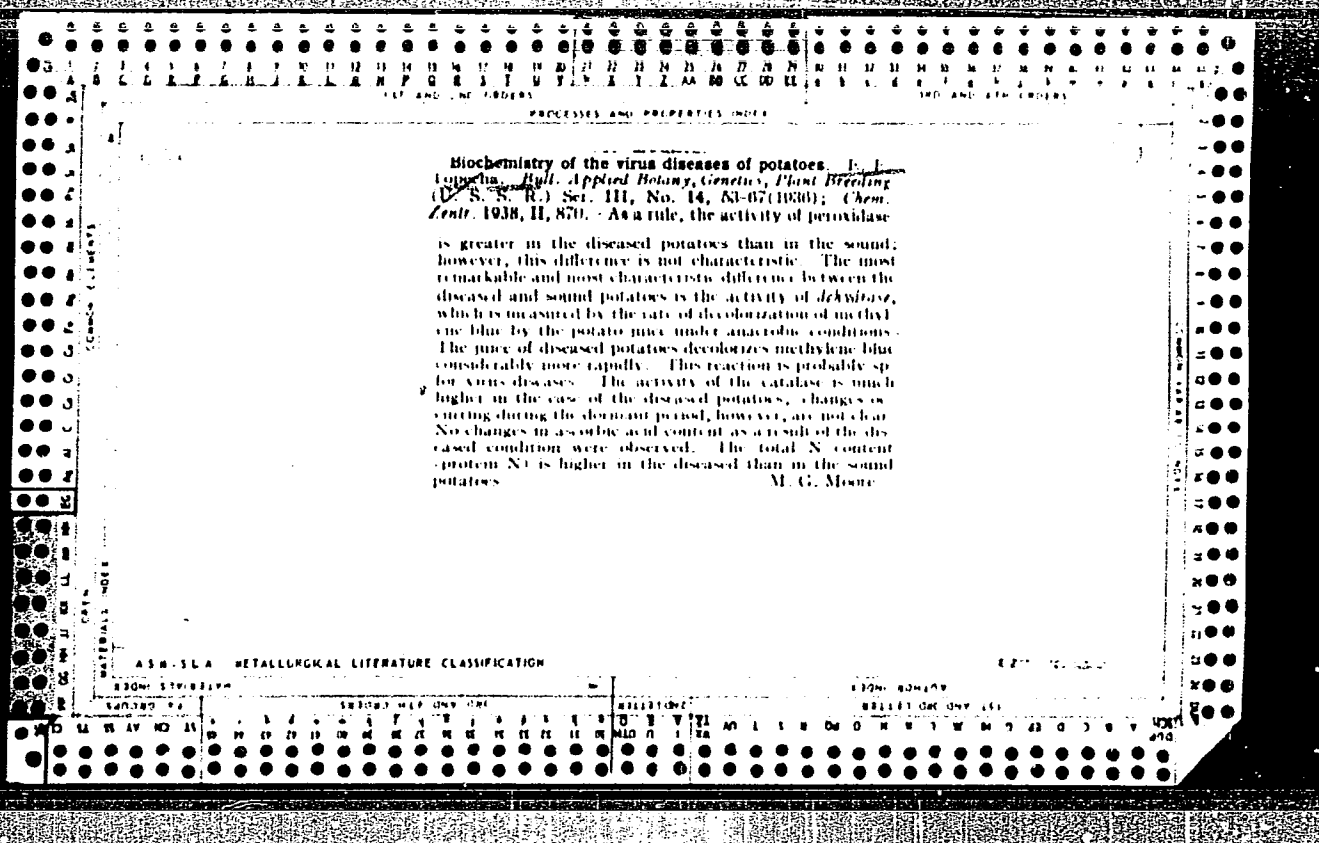
"The Evolution of Antivariollic Postvaccinal Immunity in Different Age Groups Expressed by the Titer of Agglutination Inhibition Antibodies."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 17, No 4, 66, pp 317-321.

Abstract: In a study of 1,074 sera from persons of various ages, 84.3 percent contained various amounts of antivaccine hemagglutinating antibodies. The curve of average titer versus age shows 4 peaks corresponding to maternal antibodies, first vaccination, revaccination at 7 years, and revaccination in the armed services. Small titers of the antibodies persist throughout life, with higher levels for approximately 3 years following vaccination.

Includes 2 figures and 9 references, of which 2 Russian, 3 German and 4 Western.

1/1



TOPCZEWSKI, W.

"A Mill which Grinds Everything; K. Han's Invention Valuable to Agriculture." p. 26

"Machine for Cleaning the Oilseed Pumpkin." p. 27
(Plon, Vol. 5, No. 2, Feb. 1954, Warszawa)

SO: Monthly List of ^{East European} ~~Russian~~ ^{Vol. 3, No. 6} Accessions, ^{Library of Congress,} June ¹⁹⁵⁴ ~~1955~~, Uncl.

TOPEGIN, V.P., tekhnik.

Correcting faults of the PB-35 inlet insulators. Energetik 6 no.12:
19-20 D '58. (MIRA 11:12)
(Electric insulators and insulation--Maintenance and repair)

AUTHOR: Topegin, V.P., Technician SOV/91-58-12-11/20

TITLE: On Preventing Damage to PB-35 Partition Insulators (Ustra-
neniye defektov u prokhodnykh izolyatorov tipa PB-35)

PERIODICAL: Energetik, 1958, Nr 12, pp 19-20 (USSR)

ABSTRACT: The new Soviet PB-35 partition insulators show corona dis-
charges. The author reports that technicians of his area
covered the inner metallic surface of the insulators with
conducting graphite paint. Corona discharges were thereby
eliminated.
There is 1 diagram.

Card 1/1

TOPEGIN, V.P., tekhnik.

Reconstructing the AKI-50 kenotron to test alternating current. Energetik 5 no.4:28 Ap '57.

(MIRA 10:6)

(Electric meters)

TOPEGIN, V.P., tekhnik

Applications of the K50 devices. Energetik 11 no.5:34 My
'63. (MIRA 16:7)

(Electric meters)

ACCESSION NR: AT4033719

S/0000/64/000/000/0334/0345.

AUTHOR: Stepanov, V. P.; Pridantsev, M. V.; Topilin, V. V.; Dzugutov, M. Ya.

TITLE: Effect of inertial stirring of metal during crystallization on development of spotty liquation and ingot structure

SOURCE: USSR. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali. Fizikokhimicheskiye osnovy* metallurgicheskikh protsessov (Physico-chemical basis of metallurgical processes); sbornik statey. Moscow, Metallurgizdat, 1964, 334-345

TOPIC TAGS: foundry technique, casting technique, heat resistant alloy, mold charge stirring, ingot structure, spotty liquation, mold rotation, inertial stirring

ABSTRACT: Ingots of heat resistant alloys (Cr-Ni or Fe-Cr-Ni base with Ti, Al, B or other elements), weighing 50, 1000 and 2100 kg were cast with the mold charge stirred inertially while the metal crystallized. The shapes of the ingots were round and cylindrical, round with tapers of 8 or 15°, octahedral and triconical, respectively. Stirring was in the form of retrorotary motion of the suspended charged mold, the latter's return travel being 60 to 80° for the heavier ingots and 160 to 180° for the 50 kg pieces. Stirring periods ranged from 20 to 90 min. for the former and 5 to 39 min. for the latter, at frequencies of 8 to 25 agitations per minute. Stirring reduced or eliminated

Card 1/2

USSR.

The vitamin P content of fruits and vegetables. V. A. Vadova and R. P. Topelka. *Trudy Vsesoyuz. Nauch.-Issledovatel. Vitamin. Inst.* 6, 102-6 (1963).--Berries represent the richest source of vitamin P which may be as high as 2000 mg.%. In plums, cherries, grapes, pears, and apples it varies between 40 and 1000 mg.%. The av. content is estd. as 62-600 mg.%. *Prunus avetcula* and Bergamot pears have no vitamin P. Its content in vegetables rarely exceeds 60 mg.%. B. S. Levin

TOPEKHA, E. F.

"Physiological Effect of Hydrogen Sulfide and Prussic Acid on the Germination of Wheat Seed." Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii za 1936 Goda, part 1, 1937, pp. 96-99. 423.92 L541

So: Sira - Si-90-53, 15 Dec. 1953

TOPEKHA, E. F.

"Biochemistry of Pot. to Virus Diseases," Trudy po Prikladnoi Botaniki, Genetike i Seleksii, Seria 3, no. 14, 1936, pp. 53-67. 451 R92P

So: Sira - Si-90-53, 15 Dec. 1953

NEMCHINOV, I.V. (Moskva); TOPEKHA, L.P. (Moskva)

Boundary layer near the forward critical point of a cylinder
in radiative heat transfer. PMTF no.4:29-35 N-D '60.

(MIRA 14:7)

(Boundary layer)
(Heat--Radiation and absorption)

TOPEKHA, P. K.

PA 3/49T40

USSR/Engineering
Microhardness Tests
Metals

Aug 48

"Methods of Measuring Microhardness During the
Study of Thin Layers of Metals," B. I. Kostetskiy,
P. K. Topekha, Inst of Constr Mech, Acad Sci.
Ukrainian SSR, 5 pp

"Zavod Lab" Vol XIV, No 8

Describes preparation of specimens and apparatus
used. Determines minimum permissible distances
between specimen edge and impression center,
and between centers of neighboring impressions.
Tabulates results. Includes microphotographs.

3/49T40

- [illegible]

1. TOPEKHA, P.K.
2. USSR (600)
4. Friction
7. Experimental investigation of wear in metals due to oxidation and heat, Sbor. trud. Inst.stroi.mekh.AN URSR no. 16, 1952.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

KOSTETSKIY, B.I., doktor tekhnicheskikh nauk; GOLEGO, N.L., kandidat tekhnicheskikh nauk; ~~TOPEKHA, P.K.~~ kandidat tekhnicheskikh nauk.

Chemical analysis of surface layers of metals subjected to various types of wear. Vest.mash. 36 no.10:25-26 O '56. (MLRA 9:11)
(Mechanical wear--Testing)

137-58-4-8322

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 287 (USSR)

AUTHORS: Kostetskiy, B. I., Golego, N. L., Topekha, P. K.

TITLE: Chemical Analysis of the Surface Layers of Metal Under Various Types of Wear (Khimicheskiy analiz poverkhnostnykh sloyev metalla pri raznykh vidakh iznosa)

PERIODICAL: Tr. 1-y nauchno-tekhn. konferentsii. Kiyevsk. in-t grazhd. vozdushn. flota. Moscow, 1956, pp 208-213

ABSTRACT: A method, notable for its simplicity and accuracy, has been developed to investigate the chemical composition of surface layers subjected to friction and wear. This method consists of taking ordinary specimens having removable surface layers in the form of foil (δ 0.1-0.03 mm, U8A steel) fastened to their surfaces. Direct evidence testifying to the major role of O_2 in the development and life of the major forms of wear, and to the positive role of oxidizing wear, which is characterized by a low rate of wear, a low coefficient of friction, and a high degree of surface smoothness, have been obtained. It is shown that atmospheric N does not participate in the processes occurring in friction and wear.

N. T.

Card 1/1

1. Metals--Abrasion--Surface effects 2. Metals--Surface properties--Abrasion effects 3. Metals--Surface properties
--Chemical analysis

137-58-6-13402

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 323 (USSR)

AUTHOR: Topekha, P. K.

TITLE: The Properties of the White Layers Which Appear With Friction and Wear (Priroda belykh sloyev, vznikayushchikh pri trenii i iznase)

PERIODICAL: V sb.: Razvitiye teorii treniya i iznashivaniya. Moscow, AN SSSR, 1957, pp 204-212

ABSTRACT: Bibliographic entry. Ref. RzhMet, 1958, Nr 4, abstract 8236
1. Metals--Surface properties 2. Metals--Friction 3. Abrasion
--Analysis

Card 1/1

137-58-4-8324

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4. p 287 (USSR)

AUTHOR: Topekha, P. K.

TITLE: The Nature of the White Layers Arising on Friction and Wear
(Priroda belykh sloyev voznikayushchikh pri trenii i iznosh)

PERIODICAL: Tr. 1-y nauchno-tekhn. konferentsii. Kiyevsk. in-t grazhd.
vozdushn. flota. Moscow, 1956, pp 214-226

ABSTRACT: Analysis of metal structure shows that white layers (WL) arise under oxidizing friction, i. e., at a rate of slide of 2.0 m/sec. During the first stage of oxidizing friction, a random solid solution of O_2 in the metal comes into being. During the period of its formation, this structure is of increased mobility. It is etched poorly by the usual reagents. During the second stage, a second WL comes into being, which is separated from flowing layer beneath by a rectilinear boundary and is highly brittle. It is a chemical compound of O_2 and the metal - a new phase that comes into being suddenly. It etches very poorly. WL forming by thermal wear consist of hardened metal of austenitic-martensitic structure.

Card 1/1

N. T.

1. Metals--Surface properties--Abrasion effects 2. Metals
--Surface properties--Friction effects

137-58-2-4094

TOPEKHA, P.K.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 262 (USSR)

AUTHOR: Topekha, P.K.

TITLE: A Study of the Mechanism of Initial Wear in Cases of Dry Friction Between Steel Surfaces (Issledovaniye mekhanizma nachal'nogo iznosa pri sukhom trenii stal'nykh poverkhnostey)

PERIODICALS: Tr. 1-y nauchno-tekhn. konferentsii. Kiyevsk. in-t grazhd. vozdushn. flota. Moscow, 1956, pp 140-152

ABSTRACT: Tests were made of the wearing properties of steels 45 and 10 at sliding speeds of 0.15 - 7.35 m/sec. A study was made of the effect had by the roughness of burnished and polished specimen surfaces and of the influence of the sliding speed on the quality of a surface on which wear had already begun. For a better understanding of the mechanism of initial wear, tests were made to ascertain the relative wear sustained by steel 45 after hardening and tempering. It was found that on the working surface of the specimens, once it was "worn in", there was a persistent "microroughness" which was characteristic of a given type of wear and was a function of sliding speed, load, and other external factors. The initial-wear or "wearing-in" mechanism is linked

Card 1/2

137-58-2-4094

A Study of the Mechanism of Initial Wear in Cases of Dry Friction (cont.)

to certain processes which occur in the driving type of wear. It was found, too, that if the friction continuity is broken, the intensity of wear increases. It is when wear has already begun and friction continuity is broken that the process of "wearing in" occurs.

1. Steel--Friction 2. Friction--Test methods 3. Friction--Test results T.F.

Card 2/2

KOSTETSKIY, B.I.; KOLFSNICHENKO, L.F.; OSTROVOY, Yu.D.; NATANSON, M.E.;
SKARCHENKOV, K.Z.; TOPEKHA, P.K.

Additives to lubricating oils and their effect in friction.
Fiz.-khim. mekh. mat. 1 no.1:32-39 '65. (MIRA 19:1)

1. Kiyevskiy institut grazhdanskoy aviatsii. Submitted September 15,
1964.

L 00313-66 EWT(m)/EPF(c)/T BW/DJ/GS
ACCESSION NR: AT5020432

AUTHORS: Kostetskiy, B. I.; Natanson, M. E.; Skarchenkov, K. Z.; Topekha, P. K.
UR/0000/65/000/000/0057/0060

TITLE: Choice of additives for lubrication oils

SOURCE: AN SSSR. Nauchnyy sovet po treniyu i smazkam. Teoriya smazochnogo deystviya i novyye materialy (Theory of lubricating action and new materials). Moscow, Izd-vo Nauka, 1965, 57-60

TOPIC TAGS: lubricant, lubricant additive, additive / KIGVF 1 additive, KIGVF 2 additive, MS 20 lubricating oil, KE 4 friction apparatus

ABSTRACT: New, highly effective lubrication oil additives consisting of rhodanides and dithionates of copper, iron, cobalt, and manganese, as well as complex sulfur- and fluorine-containing compounds (KIGVF-1, KIGVF-2), were developed. These additives were tested in aviation oil MS-20 over a range of conditions on friction machine KE-4 (B. I. Kostetskiy. Soprotivleniye iznashivaniyu metallov. M., Mashgiz, 1959). It was found that addition of copper rhodanide decreased wear by a factor of 2 (at $v = 300$ rpm, $P = 40$ kg/cm²), doubled the maximum possible load (to 2750 kg/cm²), and quadrupled the speed at which binding occurs

Card 1/2

L 00313-66

ACCESSION NR: AT5020432

(to 13.10 m/sec) as compared with MS-20 performance without additives. Addition of KIGVF-1 (optimum concentration corresponds to 0.5-1.5% S in oil) gave corresponding improvement factors of 4-7, 1.6-2.1, and 4.5; KIGVF-2 (0.45-1.5% concentration) gave 2-3, 1.3-1.9, and 2- to 4-fold improvements. Since the effectiveness of these additives depends on their chemical interaction with the surface, spectral analysis was performed to determine the Fe, C, N, S content in the external layers of the bearing surface. It was found that if for pure MS-20 the concentration of Fe, C, N, and S was 1, 1, 1, and 1, then addition of Cu rhodanide resulted in values of 0.81, 1.8, 9, and 4; addition of KIGVF-1 gave 0.70, 2.1, 5, and 2.5 respectively. Orig. art. has: 2 tables.

ASSOCIATION: Nauchnyy sovet po treniyu i smazkam, AN SSSR (Scientific Committee on Friction and Lubrication, AN SSSR)

SUBMITTED: 22 May 65

44
ENCL: 00

SUB CODE: FP

NO REF SOV: 010

OTHER: 000

Card 2/2

KOSTETSKIY, B.I.; TOPENJA, P.K.

Oxidizing processes during the friction and wear of metals,
Tren. i izn. v mash. no.19:66-78 '64. (MIRA 18:3)

E 5052-65

SWT 11/19/77 - 11/19/77

AN SSSR. Institut mashinovedeniya. Trenivo i iznos v mashinakh

TITLE: Oxidative processes accompanying friction and wear of metals

SOURCE: AN SSSR. Institut mashinovedeniya. Trenivo i iznos v mashinakh no. 19, 1964.

Abstract from the report of the 10th All-Union Conference on the problem of metal wear classification.

ABSTRACT: The article provides a brief review of the literature and of a research program in effect since 1948 concerning oxidation of metals during friction and wear.

L 55062-65

ACCESSION NR: AT5010237

suitable agencies for future research in the field. Orig. art. has 11 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 90

ENCL

100 F. MM. 22

KOSTETSKIY, B.I. [Kostets'kyi, B.I.]; NATANSON, M.E.; SKARCHENKOV, K.Z.;
TOPEKHA, P.K.

~~ВЫБОР ДОПОЛНИТЕЛЕЙ К ЛУБРИКАЦИОННЫМ МАСЛАМ~~
Selection of additives for lubricating oils. Dop. AN URSR
no.11:1494-1497 '64. (MIRA 18:1)

1. Kiyevskiy institut Grazhdanskogo vozdushnogo flota.
Predstavleno akademikom AN UkrSSR F.D. Ovcharenko.

S/137/61/000/007/067/072
A060/A101

AUTHORS: Kostetskiy, B. I.; Nosovskiy, I. G.; Golego, N. L.; Topekna, P.K.
TITLE: Classification of metals and alloys according to their wear resistance
PERIODICAL: Referativnyy zhurnal Metallurgiya, no. 7, 1961, 35, abstract 7Zh256
(Tr. 3-y Vses. konferentsii po treniyu i iznosu v mashinakh. T.I.",
Moscow, AN SSSR, 1960, 15-27)

TEXT: In order to devise a classification of metals according to characteristics of their oxidability and seizability, a series of tests have been carried out on a friction machine KE-2 which makes it possible to conduct tests in different gaseous media. Specimens of Fe, steel 45, Бр. АМц (Br. AMts), Бр. АЖМц (Br. AZhMts), Al, Sn, Б-83 (B-83), Pb, Бр.О-14 (Br. O-14), Бр. С-30 (Br. S-30), Bi, Sb, Cd, Ni, Zn, Mg, and Co were tested under dry friction in air, O₂, and argon and subsequently studied by metallography. The friction of specimens was carried out against a rotating disk from steel 45 at a displacement velocity of the friction surfaces of 6 m/sec and a specific pressure of 7.5 kg/cm². During the test the friction force and the temperature were measured at a distance of 1 mm

Card 1/2

Classification of metals and alloys ...

S/137/61/000/007/067/072
A060/A101

from the friction surface, and the reduced wear of the specimens by weight and volume was determined. Under the metallographic analysis the friction surface was studied and the microhardness determined. A scheme for classifying materials according to their wear-resistance under friction and taking into account their seizability and oxidability is worked out, according to which all metals and alloys are divided into 4 groups. The first group includes Fe, Cu, and some of their alloys, and also Al which, although it shows a seizability of both kind I and kind II, under conditions of oxidizing friction forms protective oxide films which show good wear resistance due to a stable bond to the base metal and possess a high hardness. The second group includes metals and alloys not prone to seizing and which form protective oxide films with high wear resistance under oxidizing friction. Sn and its alloys and a whole series of antifriction metals and alloys belong to this group. The third group includes metals (Sb, Bi, Cd) which do not demonstrate seizability and under oxidizing friction form very fragile oxide films, which raise sharply the wear rate. The fourth group includes metals (Zn, Mg) which possess seizability and under conditions of oxidizing friction form easily disintegrating oxide films which also increase the wear rate.

L. Gordiyenko

[Abstracter's note: Complete translation]

Card 2/2

PHASE I BOOK EXPLOITATION . SOV/5053

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 34, 1958.

Iznos i iznosostoykost'. Antifrictionnyye materialy (Wear and Wear Resistance. Antifriction Materials) Moscow, Izd-vo AN SSSR, 1960. 273 p. Errata slip inserted. 3,500 copies printed. (Series: Ita: Trudy, v. 1)

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Resp. Ed.: M. M. Krushchov, Professor; Eds.: Eds. of Publishing House: N. Ya. Klebanov, and S. L. Orlik; Tech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya, AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya Konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in 5 main areas:

- 1) Hydrodynamic Theory of Lubrication and Friction Bearings (Chairman: Ye. M. Gut'yar, Doctor of Technical Sciences, and A. E. D'yachkov, Doctor of Technical Sciences); 2) Lubrication and Lubricant Materials (Chairman: G. V. Vinogradov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairman: B. V. Deryagin, Corresponding Member of the Academy of Sciences USSR, and I. V. Kragel'skiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: M. M. Krushchov, Doctor of Technical Sciences); and 5) Friction and Antifriction Materials (Chairman: I. V. Kragel'skiy, Doctor of Technical Sciences). Chairman of the general assembly (on the first and last day of the conference) was Academician A. A. Blagonravov. K. N. Prutzhanskiy, Candidate of Technical Sciences, was scientific secretary. The transactions of the conference were published in 3 volumes, of which the present volume is the first. This volume contains articles concerning the wear and wear resistance of antifriction materials. Among the topics covered are: modern developments in the theory and experimental science of wear resistance of materials, specific data on the wear resistance of various combinations of materials, methods for increasing the wear resistance of certain materials, the effects of friction and wear on the structure of materials, the mechanism of the seizing of metals, the effect of various types of lubricating materials on seizing, abrasive wear of a wide variety of materials and components under many different conditions, modern developments in antifriction materials, and the effects of finish machining on wear resistance. Many personalities are mentioned in the text. References accompany most of the articles.

WEAR AND WEAR RESISTANCE

1. General Problems of the Theory of Wear. Effect of Various Factors on Wear. Increasing Wear Resistance. Krushchov, M. M. Modern Trends in the Development of the Science of Wear Resistance of Materials 8
- Kostetskiy, B. I., I. G. Mosovskiy, N. L. Golega, and P. K. Topolova. Classification of Metals and Alloys According to their Wear Resistance 15
- Kragel'skiy, I. V. Wear as a Result of Repeated Deformation of Surface Layers 27
- Kostetskiy, B. I., P. K. Topolova, and I. G. Mosovskiy. Secondary Structures on Friction Surfaces, and the Wear of Metals 152

KOSTETSKIY, B.I.; NOSOVSKIY, I.G.; TOPEKHA, P.K.; TROTSIK, O.I.;
KARETA, N.L.

X-ray investigation of the structure of friction surfaces. Fiz.
met. 1 metalloed. 7 no.1:95-101 Ja '59. (MIRA 12:4)

1. Kiyevskiy institut grazhdanskogo vozdušnogo flota.
(Steel--Metallography) (Surfaces (Technology))

SOV/126-7-1-13/28

AUTHORS: Kostetskiy, B.I., Nosovskiy, I.G., Topekha, P.K.,
Trotsik, O.I. and Kareta, N.L.

TITLE: X-Ray Investigation of the Structure of Rubbing Surfaces
(Rentgenograficheskoye issledovaniye struktury poverkhnostey treniya)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 1,
pp 95-101, (USSR)

ABSTRACT: By means of a general metallographic analysis method it was established that in the course of service of steel in an oxidizing atmosphere, diffusion of oxygen atoms in steel takes place in plastically deformed layers of the parts rubbing against each other, as the result of which a layer forms on the rubbing surfaces, consisting of a solid solution of oxygen in iron and the chemical compounds FeO , Fe_2O_3 and Fe_3O_4 (Refs.1-3). These layers have been called "white unetchable layers"; however, there is no agreement yet as to their nature. After a number of investigations the authors concluded that the white layer, forming in service at high temperatures, in grinding and in

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rapid cutting, is a hardened structure. In order to confirm the authors' hypothesis of the nature of white layers, and to elucidate the part played by oxygen in the mechanism of oxidizing wear, the necessity arose of carrying out a complex investigation of the white layers forming during oxidizing and thermal wear. Specimens of steel St.45 and Armco iron were rubbed by sliding. The normal pressure applied to the specimen in the experiment was maintained constant (10 kg/cm^2). The rates of slip chosen were similar to those in oxidizing and thermal wear by hardening. A series of experiments was carried out in various gaseous media (air, argon, oxygen) with the aim of creating favourable conditions for the development of various aspects of wear. The preparation of the metal surface layers for the investigation was carried out under certain definite experimental conditions. The specimens were tested on the KE-2 and KE-4 machines (Ref.10). X-ray investigations, metallographic analysis and microhardness determinations of the rubbing surfaces and surface layers were carried out. This complex study was

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carried out, taking into consideration the conditions of the formation and properties of secondary structures arising in the course of rubbing, in connection with definite relationships known from the theory of wear. A series of specimens (see Table p.97) were prepared for this study. X-rays were used for the study of the phase composition of the thin surface layers of secondary structures forming during the rubbing process. The X-ray exposure was carried out by a narrow pencil of X-rays at a diameter of the illuminated portion of 0.12-0.15 mm. The diameter of the X-ray camera was 57 mm. Irradiation from an iron anticathode was used. The source of X-rays was a sharp focusing X-ray tube of B.Ya. Pines' construction. 150 exposures were taken. In Fig.1 a photomicrograph of the rubbing surfaces of a specimen of steel St45, tested in air atmosphere, is shown. The rate of slip was 0.4 m/sec. In Fig.2 the photomicrograph of the cross-section of the surface layers of the specimen, tested in an atmosphere of air, is shown. Fig.3 is a photomicrograph of the rubbing surface of a steel St45 specimen, tested in an atmosphere of air. The rate of slip was

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1.5 m/sec. Fig.4 is a photomicrograph of the cross-section of surface layers of the specimen, tested in an atmosphere of air at a slip rate of 1.5 m/sec. Fig.5 is a photomicrograph of the wear surface of the specimen, which had been tested in an atmosphere of air at a slip rate of 6 m/sec. Fig.6 is a photomicrograph of the cross-section of the surface layers of the specimen which had been tested in an atmosphere of air at a slip rate of 6 m/sec. Fig.7 is a photomicrograph of the wear surface of the specimen which had been tested in an atmosphere of oxygen at a slip rate of 1.5 m/sec. Fig.8 is a photomicrograph of the cross-section of the surface layers of the specimen which had been tested in an atmosphere of oxygen at a slip rate of 1.5 m/sec. As a result of experiments, the authors have arrived at the following conclusions:

(1) Under various conditions of rubbing thin surface layers of iron and steel undergo a fundamental change in structure and composition, the nature of which is determined by the plastic deformation processes, heat evolutions during rubbing and chemical reactions between the metal and the surrounding

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(2) Investigations of the structure of the surface layers of steel and iron have confirmed the conclusions, arrived at by the authors in their work on the classification of the aspects of wear, as to the occurrence of oxidizing and thermal wear of metal.

(3) An X-ray structural analysis of the rubbing surfaces of iron and steel has shown that in the first type of wear hardening no thermal and chemical reactions occur on the rubbing surfaces. The main process, determining this aspect of wear, is the plastic deformation of the metal, as well as the formation and destruction of metallic bonds. In oxidizing wear, the main factors are the chemical processes of the interaction between metal and oxygen from the air. In all series of experiments on the oxidizing wear, lattices of the chemical compounds FeO , Fe_3O_4 and $\alpha\text{-Fe}_2\text{O}_3$ were observed. In thermal wear the main factors are thermal processes taking place as the result of heat evolved due to rubbing. In this

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austenite-martensite are observed in the rubbing surfaces of steel specimens.

There are 8 figures, 1 table and 10 Soviet references.

ASSOCIATION: Kiyevskiy institut grazhdanskogo vozdushnogo flota
(Kiyev Institute of the Civil Air Fleet)

SUBMITTED: April 11, 1957

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TOPEKHA, Petr Pavlovich; KOVYZHENKO, V.V., otv. red.; SNAVZYUK,
O.L., red.

[Problems of the unity of the trade-union movement in modern
Japan] Voprosy edinstva profsoiuznogo dvizheniia v sovremen-
noi Iaponii. Moskva, Izd-vo "Nauka," 1964. 162 p.
(MIRA 17:4)

30-58-5-26/36

AUTHOR: Topekha, P. P., Candidate of Historical Sciences

TITLE: *see p. 2*
Extension of the Scientific Relations Between Eastern and Western Countries (Rasshireniye nauchnykh svyazey vostochnykh i zapadnykh stran)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Mr 5, pp. 118-121 (USSR)

ABSTRACT: At the end of October and the beginning of November of last year the Japanese National Commission to the UNESCO held an international symposium on the history of the cultural connections between the countries of the East and the West in Tokyo and Kyoto. 66 delegates and 75 guests from more than 20 countries of Asia, Europe and America took part in the work. The Soviet representatives were A. P. Okladnikov, T. N. Kary-Niyazov and the author of this article. 45 reports were heard. In this opening address the President of the Japanese that a better mutual understanding among the peoples, which is necessary for their peaceful cooperation, can only be attained on the basis of

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a thorough knowledge and mutual respect of the respective cultures of these peoples. The symposium demonstrated the great achievements made by the scientists of Eastern countries. More than half of all participants were representatives of Eastern countries: India, Japan, Indonesia, Cambodia, Ceylon and others. The Soviet scientists submitted 3 reports:

- 1) A. P. Okladnikov on the part played by ancient Pribaykal'-ye in the cultural connections between East and West.
- 2) T. N. Kary-Niyazov on cultural connections of the peoples of Central Asia with the East in the Middle Ages.
- 3) P. P. Topekha on the establishment of cultural connections between Russia and Japan.

Further some shortcomings of the symposium are pointed out: the problems of the present cultural contacts were insufficiently treated; the limitation of the time of speech was too strictly handled. In the closing session the request was directed to the UNESCO whether it were not possible to establish an international organ that would perform translations of the

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most important works in the field of humanitarian sciences. After the termination of the symposium A. P. Okladnikov in Kyoto held a lecture on the works of Soviet archaeologists and historians in the field of the ancient history of Primor'ye and Eastern Siberia. In Tokyo in the Society of USSR Research T. N. Kary-Niyazov reported on the cultural structure in Uzbekistan. By invitation of the President of Hosei University (Tokyo) the author held a lecture for students on the establishment of cultural relations between Japan and Russia. The Soviet delegation visited research institutes, museums, schools and had meetings with Japanese scientists.

1. Scientific intelligence 2. Social sciences 3. Political sciences

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TOPEL', A.Kh.

KOTLYAR, A.A., assistant (Kiyev); TOPEL', A.Kh., starshiy laborant (Kiyev)

Using AKR-9 elastic plastic in dental prosthesis. Probl. stom.
3:413-416 '56 (MLRA 10:5)

(DENTAL PROSTHESIS) (PLASTICS)